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(54) Multiple port register file with interleaved write ports

(57) A high speed register file is provided for use with Very Long Word Instruction (VLIW) and N-way superscaler processors. The high speed register file includes a selected number of copies of a general purpose register (GPR) building block. The GPR building block

includes at least two interleaved sub-banks of registers. Each of the sub-banks includes a number N of write ports and a number M of read ports. The sub-banks are interleaved by write ports and have non-interleaved read ports.

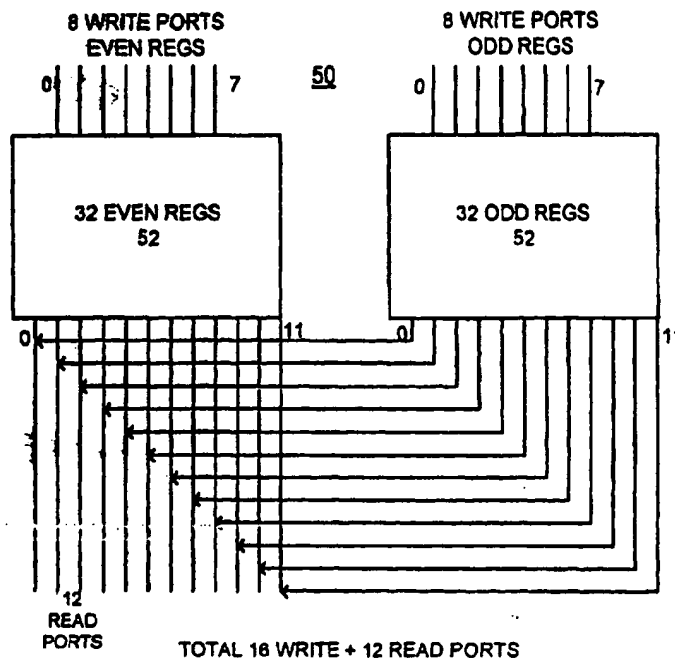


FIG.1

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EUROPEAN SEARCH REPORT

Application Number
EP 96 48 0056

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CI.8)
A	EP 0 325 310 A (PHILIPS NV) 26 July 1989 (1989-07-26) * column 7, line 51 - column 8, line 32 *	1,8	G06F9/30 G06F9/38
A	US 5 392 411 A (OZAKI SHINJI) 21 February 1995 (1995-02-21) * column 4, line 53 - column 7, line 46; figures 2,3 *	1,2,5,7	
A	PATENT ABSTRACTS OF JAPAN vol. 017, no. 692 (P-1663), 17 December 1993 (1993-12-17) & JP 05 233281 A (TOSHIBA CORP), 10 September 1993 (1993-09-10) * abstract *	1,3,4,9	
			TECHNICAL FIELDS SEARCHED (Int.CI.8)
			G06F
The present search report has been drawn up for all claims.			
Place of search THE HAGUE		Date of completion of the search 30 November 2000	Examiner Daskalakis, T
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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30-11-2000

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